

NATA ACCREDITED • TYPE A INSPECTION BODY

Your facade test, independently verified.

Independent witnessing, supervision and reporting of facade performance tests, so builders and facade consultants can accept a system with confidence. In Australia and at laboratories in China, Thailand, South Korea and Vietnam.



Performance mock-up under test

100+

facade performance tests
witnessed

8

overseas laboratories in four
countries

11 yrs

in CSIRO's facade testing
laboratory

2019

NATA accredited since, No.
20528

TYPE A INSPECTION

No stake in the outcome.

As a Type A inspection body, beTcs is independent of the facade contractor, the manufacturer and the test laboratory. Our only interest is whether the specimen meets your specification, and whether the test properly proved it.

THE RISKS WE TAKE OFF YOUR HANDS

- Tests run to the wrong procedure or parameters
- Under-equipped or unaccredited laboratories
- Retests, programme delays and disputes
- Accepting a system that hasn't proven its performance

How we work From test planning to the accredited report

01

Before the test

Advise on the test schedule and PMU configuration.

Vet the laboratory's accreditation, equipment and calibration.

Agree procedures, parameters and acceptance criteria.

02

During the test

Witness and supervise every test sequence.

Ensure standards and agreed parameters are correctly applied.

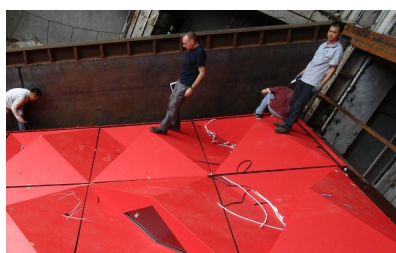
Record observations, failures and remediation.

03

After the test

Analyse results independently against the performance requirements.

Issue a NATA-accredited inspection report.



LED BY EXPERIENCE

Our principal inspector spent 20 years at CSIRO, the last 11 in its Facade Engineering & Weather Performance of Buildings laboratory, where SIROWET was developed before becoming AS/NZS 4284: full-scale facade testing in a NATA-accredited laboratory, and test witnessing throughout China and South-East Asia.

What we inspect

Laboratory test witnessing

Curtain wall, facade, window and door prototypes tested for air, water and structural performance, in Australia and overseas.

AS/NZS 4284 • AS/NZS 4420.1 • ASTM • AAMA 501 series • BS EN series

Field testing of installed facades

On-site water penetration checks and quality assurance of installed curtain walls, windows and sloped glazing.

FGIA/AAMA 501.2 & 503 • BS EN 13051

Impact performance testing

Soft- and hard-body impact testing of cladding panels and facade elements, using beTcs's own impactors to ISO 7892.

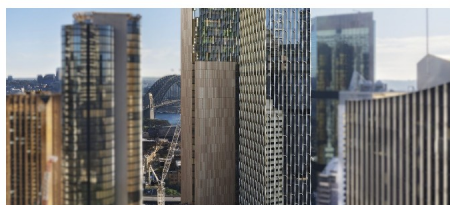
CWCT TN75 & TN76 • BS EN 12600, 13049, 14019

NCC weatherproofing verification

Wall systems verified against NCC Performance Requirements F3P1 and H2P2 for water penetration.

NCC Volume One F3V1 • Volume Two H2V1

Selected case studies



55 Pitt Street

Sydney

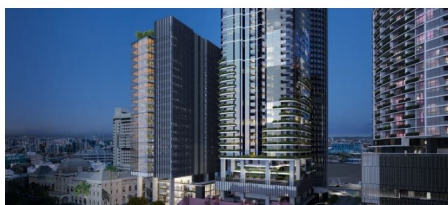
Client & builder Mirvac

Facade BM Windows

Laboratory Winwall, Vietnam

AS/NZS 4284 • CWCT TN75/76 • AAMA 501.1

Proof of concept for full-storey bespoke bi-fold windows: cyclic fatigue of the operating mechanism, lateral load and dynamic wind pressure. Plus almost 200 soft- and hard-body impacts on terracotta tile profiles.



Queen's Wharf Towers 5 & 6

Brisbane

Client QWB Residential Precinct

Operation

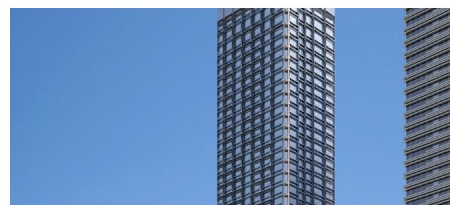
Builder FEC Constructions

Facade Yuanda Australia

Laboratory Shenyang Kezheng, China

AS/NZS 4284

Dead weights applied to planter boxes to load the curtain wall panels, and a large, bespoke lift-and-tilt operable window assessed against the specified performance parameters.



133 Liverpool Street

Sydney

Client & builder Deicorp

Facade Core Facade Delivery Mgmt

Supplier BM Windows

Laboratory Winwall, Vietnam

AS/NZS 4284

Complex curtain wall geometry with very large, horizontally spanning vision IGUs, demanding careful analysis of the structural test results.

Where we've witnessed

Overseas laboratories, plus facilities across Australia

China Academy of Building Research Co., Ltd Beijing, China

Shenyang Kezheng Construction Engineering Testing Co., Ltd

Shenyang, China

Shanghai Jianke Technical Assessment of Construction Co., Ltd (SRIBS) Shanghai, China

Leading Edge Construction Materials Testing Company Limited

Guangdong, China

Research Engineering Development Facade Consultants Ltd (RED), Fire and Facade Testing Laboratory Huizhou, China

Permasteelisa (Thailand) Co., Ltd

Chon Buri, Thailand

Architectural Testing Asia Inc. Daejeon, South Korea

Winwall Technology (Vietnam) Co., Ltd

Binh Duong, Vietnam


WORLD RECOGNISED
ACCREDITATION

No. 20528

Accreditation

Accredited by the National Association of Testing Authorities, Australia (NATA) to ISO/IEC 17020:2012 as a Type A inspection body, Accreditation No. 20528, held since May 2019. Maintained through annual NATA assessment and independent third-party internal audits. NATA is a Global ACI full member and MRA signatory. Professional indemnity and public liability insurance held; certificates on request.

Scope: inspection of cladding systems, curtain walling, door, window and skylight assemblies, facade assemblies and sloped glazing systems, covering compliance for structural properties and weather performance, process inspection and witnessing.

Acceptance criteria are drawn from client specifications and the relevant standards, including:

Australian	AS/NZS 4284 (SIROWET) · AS 2047 · AS/NZS 4420.1 · AS 4040.0-.4 · AS/NZS 4040.5 · AS 4055 · NCC F3V1, H2V1
North American	FGIA/AAMA 501.1, 501.2, 501.4, 501.5, 503 · ASTM E283, E330, E331, E547
European	BS EN 1026, 1027, 12152, 12153, 12154, 12155, 12179, 12207, 12208, 12210, 12211, 12600, 13049, 13051, 13116, 14019
CWCT	TN75, TN76

Project experience

More than 70 projects across Australia and overseas, including

Sydney & NSW 133 Liverpool Street · 55 Pitt Street · Chifley Square South · 33 Alfred Street (AMP Building, heritage) · One Circular Quay, Tower A (Residential) & Tower B (Hotel) · Atlassian Central · Sixty Martin Place · Metro Martin Place North & South Towers · 333 George Street · 200 George Street (skylights) · Westfield Office Tower, 85 Castlereagh Street · Barangaroo Towers C4 & C5 · Crown Sydney · International Convention Centre & Hotel, Darling Harbour · Star Casino · The Residence Hyde Park · The Harrington Collection, The Rocks · Museum of Contemporary Art · UTS Central · Abercrombie Precinct, University of Sydney · Chris O'Brien Lifehouse, RPA · Canva Sydney Campus · AURA, 168 Walker Street · Northpoint, 100 Miller Street · Metro Residences, Chatswood · Australian Hearing Hub, Macquarie University · PHIVE, Parramatta Square · Arthur Phillip High School · Western Sydney University, Bankstown · ALDI Head Office, Minchinbury · Atura Hotel, Oran Park · Gables Preschool & Primary School · Newington College Eungai Creek Campus · Wee Waa High School

Queensland Queen's Wharf Towers 1, 2 & 3, 5 & 6 · One William Street · 480 Queen Street · Central Plaza 3 · Queensland Children's Hospital · Brisbane Airport Domestic Terminal expansion · Jewel, Gold Coast

Victoria 80, 171, 447, 727 & 888 Collins Street · 700 & 720 Bourke Street · 308 Exhibition Street · Melbourne Square, Southbank · West Side Place 2 podium · La Trobe University Biosciences Research Centre

Western Australia Crown Towers · Brookfield Place, City Square & Tower 2 · New Children's Hospital · Fiona Stanley Hospital · WA Institute for Medical Research

South Australia New Royal Adelaide Hospital · SAHMRI · University of Adelaide Illumin8 **ACT** ANU New Hall of Residence · AFP Forensic Facility · National Portrait Gallery (for 3M) · 82 Northbourne Avenue

Overseas Fusionopolis, Singapore · Rose Garden Apartments, Auckland **Systems** CSR Inclose unitised rainscreen · CSR Cemintel · CSR Hebel

Clients

Builders, facade contractors, manufacturers and asset owners



Bring us in before the test schedule is fixed.

Independent advice is worth most before the PMU is designed and the laboratory is booked.

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